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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/636,158	08/07/2003	Roderick MacRae	18047	3609

26794 7590 11/28/2005

TYCO ELECTRONICS CORPORATION  
4550 NEW LINDEN HILL ROAD, SUITE 450  
WILMINGTON, DE 19808

EXAMINER

FAULK, DEVONA E

ART UNIT PAPER NUMBER

2644

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/636,158

Applicant(s)

MACRAE, RODERICK

Examiner

Devona E. Faulk

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-12 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, filed 6/24/2005, with respect to the rejection(s) of claim(s) 1-12 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of applicant's admitted prior art in view of the applicant's admitted prior art in view of Jaeger.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (Figures 1(a) and 1(b), pages 1-2, paragraphs 002-0007; page 3, paragraph 0015) in view of Jaeger et al. (US 6,093,144).

Regarding **claim 1**, the applicant's admitted prior art discloses a microphone enclosure comprising;

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a casing (applicant's admitted prior art; Figure 1(a) and 1(b)) for containing a microphone (112, Figure 1(b)) for receiving sound and converting said sound into at least one electrical signal; and

at least one inlet (applicant's admitted prior art; 118, inlet ; page 3, paragraph 0015) for allowing sound to reach said microphone;

said at least one inlet having a one opening forming at least one tortuous path therein (applicant's admitted prior art; Figure 1(b); page 3, paragraph 0015),

wherein said microphone is disposed between said at least one inlet and a wall of the casing such that sound can only impinge upon the microphone by traveling through said at least one inlet (applicant's admitted prior art; Figure 1(b)).

The applicant's admitted prior art fails to disclose but Jaeger teaches of an inlet having a plurality of openings (inlet ports 242, Figure 2C). It would have been obvious to modify the applicant's admitted prior art so that the inlet has a plurality of openings as taught by Jaeger in order to better prevent objects from entering the hole far enough to pierce the microphone or microphone gasket (applicant's admitted prior art, page 3, paragraph 0015).

Regarding **claim 2**, the applicant's admitted prior art in view of Jaeger discloses wherein said at least one inlet comprises an upper and a lower opening, said upper and lower opening converging at said microphone (Jaeger, Figure 2C).

Regarding **claim 3**, the applicant's admitted prior art in view of Jaeger discloses wherein said casing comprises an upper, portion, a middle portion, and a lower portion which form said upper and lower openings (Jaeger , Figure 2C).

Regarding **claim 4**, the applicant's admitted prior art as modified by Jaeger discloses wherein said microphone enclosure further contains a circuit board; integrated components on said circuit board for receiving signals from said microphone; and an antenna in communication with said integrated components for transmitting said electrical signal (applicant's admitted prior art; Figure 1(b)).

Regarding **claim 5**, the applicant's admitted prior art as modified by Jaeger discloses a microphone gasket approximate a microphone (applicant's admitted prior art; Figure 1(b); page 2, paragraph 0005).

Regarding **claim 6**, the applicant's admitted prior art discloses a microphone enclosure comprising:

a casing (applicant's admitted prior art; Figures 1(a) and 1(b)) or containing a microphone (112; Figure 1(b)); for receiving sound and converting said sound into at least one electrical signal;

an first opening proximate said microphone (applicant's admitted prior art; Figure 1(b))

wherein said microphone is disposed between said at least one inlet and a wall of the casing such that sound can only impinge upon the microphone by traveling through said at least one inlet (applicant's admitted prior art; Figures 1(a) and 1(b) discloses a microphone 112 between an opening or inlet (108) and a casing (Figure 1)).

The applicant's admitted prior art fails to disclose but Jaeger teaches of a second opening proximate said microphone and at least one inlet formed by a convergence of

said first opening and said second opening (Jaeger, Figure 2C) for allowing sound to impinge upon said microphone.

It would have been obvious to modify the applicant's admitted prior art to include a second opening such that the inlet is formed by a convergence of a first and a second opening as taught by Jaeger in order to better prevent objects from entering the hole far enough to pierce the microphone or microphone gasket (applicant's admitted prior art, page 3, paragraph 0015).

Regarding **claim 7**, the applicant's admitted prior art in view of Jaeger discloses wherein said casing comprises an upper, portion, a middle portion, and a lower portion which form said upper and lower openings (Jaeger , Figure 2C).

Regarding **claim 8**, the applicant's admitted prior art as modified by Jaeger discloses wherein said microphone enclosure further contains a circuit board; integrated components on said circuit board for receiving signals from said microphone; and an antenna in communication with said integrated components for transmitting said electrical signal (applicant's admitted prior art; Figure 1(b)).

Regarding **claim 9**, the applicant's admitted prior art as modified by Jaeger discloses a microphone gasket approximate a microphone (applicant's admitted prior art; Figure 1(b); page 2, paragraph 0005).

Regarding **claim 10**, the applicant's admitted prior art discloses a portable radio (Figures 1(a) and 1(b); page 3, paragraph 0015) comprising:

a circuit board (applicant's admitted prior art; Figure 1(b); implicit to a radio);

integrated components on said circuit board for transmitting and receiving signals to and from said portable radio (applicant's admitted prior art; Figure 1(b); implicit to a radio);

an antenna (applicant's admitted prior art; 1(a) and 1(b)) in communication with said integrated components for transmitting and receiving said signals (Figure 1)(antenna is obvious present, a radio has to have an antenna);

a microphone (applicant's admitted prior art; 112, Figure 1(b)) in communication with said integrated components on said circuit board for converting between sound and electrical signals;

a casing for containing a microphone, said integrated components, and said circuit board (applicant's admitted prior art; Figures 1(a) and 1(b); page 3, paragraph 0015);

a first opening in said casing proximate said microphone (Figure 1(b); applicant's admitted prior art);

wherein said microphone is disposed between said at least one inlet and a wall of the casing such that sound can only impinge upon the microphone by traveling through said at least one inlet (Figures 1(a) and 1(b) discloses a microphone 112 between an opening or inlet (108) and a casing (Figure 1(a); applicant's admitted prior art).

The applicant's admitted prior art fails to disclose but Jaeger teaches of a second opening proximate said microphone and at least one inlet formed by a convergence of

said first opening and said second opening (Figure 2C) for allowing sound to impinge upon said microphone.

It would have been obvious to modify the applicant's admitted prior art to include a second opening such that the inlet is formed by a convergence of a first and a second opening as taught by Jaeger in order to better prevent objects from entering the hole far enough to pierce the microphone or microphone gasket (applicant's admitted prior art, page 3, paragraph 0015).

Regarding **claim 11**, the applicant's admitted prior art in view of Jaeger discloses wherein said casing comprises an upper, portion, a middle portion, and a lower portion which form said upper and lower openings (Jaeger , Figure 2C).

Regarding **claim 12**, the applicant's admitted prior art as modified by Jaeger discloses a microphone gasket approximate a microphone (applicant's admitted prior art; Figure 1(b); page 2, paragraph 0005).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEF

  
**VIVIAN CHIN**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600